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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,719	01/03/2002	Toshiaki Takenaka	43890-542	5526

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EXAMINER

FUNK, STEPHEN R

ART UNIT PAPER NUMBER

2854

DATE MAILED: 10/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/937,719

Applicant(s)

TAKENAKA ET AL.

Examiner

Stephen R Funk

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MAY

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 and 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7, 12 and 14-21 is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-10, 13 and 23 is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

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Claim 8 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

There is no support in the specification for a paste removing protrusion being formed in a one-piece structure with a side of the plate framework *and* having a spacing between the protrusion and the framework sealed with resin. See claims 7 and 8, page 8 lines 22 - 24 and page 14 lines 10 - 13 in the specification. These embodiments are mutually exclusive as there would be no space between the protrusion and the framework if they are formed of a one-piece structure.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not apparent how there can be a "space" between the protrusion and framework as is recited in claim 8 when claim 7 recites that the protrusion and the framework are formed of a one-piece structure.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 - 6, 9, 10, 13, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneoka et al. (JP 02-34,395) in view of applicant's admission of prior art.

Kaneoka et al. disclose a plate comprising a mask (2) with an opening area (3, 4, 5) and a non-opening area (all areas other than 3-5) and a paste removing protrusion (1 - far left and right sides of Figure 1c) extending from a surface of the plate. The broad recitation of an opening area does not distinguish from the individual openings in the mask of Kaneoka et al. Note that the protrusion is "arranged" on the plate in a location that a squeegee could contact the protrusion before contacting the mask. Kaneoka et al. do not appear to disclose a plate framework.

Applicant discloses the conventionality of a mask having a plate framework (10) in prior art Figures 9 and 10. It would have been obvious to one of ordinary skill in the art to provide the plate of Kaneoka et al. with a framework to provide stability for the mask.

With respect to claims 2 and 13 note the flat and slanting area in Figure 1c of Kaneoka et al.

With respect to claims 3 and 23, as broadly recited, the protrusion is disposed on the non-opening area since there are no openings within the protrusion. Note that the claims do not require that a protrusion only be formed in a non-opening area.

With respect to claims 4 and 5 note the protrusions (1) on the far sides of the mask in Figure 1c of Kaneoka et al.

With respect to claims 6 and 13 since the protrusion of Kaneoka et al. is disposed at the sides of the mask it would be disposed on a side of the framework when the mask is attached to a framework.

With respect to claims 9 and 10 the metallic sheets of Kaneoka et al. would appear to be made of the same material and thus have the same smoothness and coefficient of friction. It

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would have been obvious to one of ordinary skill in the art to provide the plate of Kaneoka et al. with similar metal sheets so as to more simply construct the plate.

Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 8 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Claims 7, 12, and 14 - 21 are allowed.

The following is an examiner's statement of reasons for allowability: With respect to claim 11 Kaneoka et al. do not appear to disclose the relationship between the slanting area length and the thickness of a squeegee. With respect to claim 20 Kaneoka et al. do not teach the overall combination of the plate and moving back and forward squeegees with the moving back squeegee passing over the paste protrusion member.

Applicant's arguments filed September 9, 2003 have been fully considered but they are not persuasive. Applicant's argument that Kaneoka et al. is silent as to the positioning of the squeegee does not distinguish the claimed mask from that disclosed by Kaneoka et al. since Kaneoka et al. need not specifically teach the positioning of the squeegee but only that the protrusion is arranged such that a squeegee could contact the protrusion before the mask. Applicant's argument that Kaneoka et al. do not teach a plate framework is rendered moot by the new grounds of rejection. However, applicant's argument that there is no motivation to provide the mask of Kaneoka et al. with a framework because Kaneoka et al. teach a dual layer mask is speculative. Kaneoka et al. do not teach the dual layer mask to achieve support but rather to print paste at different thicknesses. It would have been objectively obvious to one of ordinary

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skill in the screen printing art to provide any mask with a plate framework to provide support to the mask and prevent twisting and warping of the mask during printing. Such is well known in the art.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen R. Funk whose telephone number is (703) 308-0982. The examiner can normally be reached from 7:30am to 6:00pm, except Wednesdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Hirshfeld, can be reached on (703) 305-6619.

The fax phone number for official papers is (703) 872-9306. Upon consulting with the examiner *unofficial* papers only may be faxed directly to the examiner at (703) 746-4393.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

SRF
October 16, 2003



**STEPHEN R. FUNK
PRIMARY EXAMINER**